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IFW

February 15, 2007

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Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Art Unit 1711

Attn: Mail Stop Amendment

Re: U.S. Utility Appl. No. 10/535,624  
U.S. Nat'l. Stage of Int'l Appl. No. PCT/KR2002/002195  
Int'l Filing Date: November 22, 2002  
For: **Antimicrobial Peptide Isolated from Halocynthia Aurantium**  
Inventors: In-Hee LEE *et al.*  
Our Ref: 2393.0010000/JUK/WBC

Sir:

Transmitted herewith for appropriate action are the following documents:

1. First Supplemental Information Disclosure Statement Under 37 C.F.R. § 1.97(b);
2. PTO/SB/08B (3 pages) citing twenty-two (22) references (NPL25-NPL46);
3. Copies of twenty-two (22) cited references (NPL25-NPL46); and
4. One (1) return postcard.

It is respectfully requested that the attached postcard be stamped with the date of filing of these documents, and that it be returned to our courier.

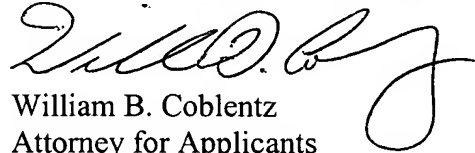
In the event that extensions of time are necessary to prevent abandonment of this patent application, then such extensions of time are hereby petitioned.

Commissioner for Patents  
February 15, 2007  
Page 2

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



William B. Coblentz  
Attorney for Applicants  
Registration No. 57,104

JUK/WBC:cpn  
Enclosures

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

re application of:

In-Hee LEE *et al.*

Appl. No.: 10/535,624

Int'l Filing Date: November 22, 2002

For: **Antimicrobial Peptide Isolated  
from Halocynthia Aurantium**

Confirmation No.: 1731

Art Unit: 1711

Examiner: *To Be Assigned*

Atty. Docket: 2393.0010000/JUK/WBC

**First Supplemental Information Disclosure Statement  
Under 37 C.F.R. § 1.97(b)**

*Mail Stop Amendment*

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Listed on accompanying IDS Form, PTO/SB/08B, are documents that may be considered material to the examination of this application, in compliance with the duty of disclosure requirements of 37 C.F.R. §§ 1.56, 1.97 and 1.98. The numbering on this First Supplemental Information Disclosure Statement is a continuation of the numbering in Applicants' Information Disclosure Statement filed on January 30, 2006 in connection with the above-captioned application.

Copies of documents **NPL25** to **NPL46** are submitted.

Where the publication date of a listed document does not provide a month of publication, the year of publication of the listed document is sufficiently earlier than the effective U.S. filing date and any foreign priority date so that the month of publication is not in issue. Applicants have listed publication dates on the attached IDS Forms based on information presently available to the undersigned. However, the listed publication dates should not be construed as an admission that the information was actually published on the date indicated.

Applicants reserve the right to establish the patentability of the claimed invention over any of the information provided herewith, and/or to prove that this information may not be prior art, and/or to prove that this information may not be enabling for the teachings purportedly offered.

This statement should not be construed as a representation that a search has been made, or that information more material to the examination of the present patent application does not exist. The Examiner is specifically requested not to rely solely on the material submitted herewith.

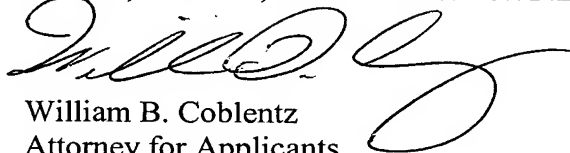
This First Supplemental Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits. No statement or fee is required.

It is respectfully requested that the Examiner initial and return a copy of the enclosed IDS Forms, and indicate in the official file wrapper of this patent application that the documents have been considered.

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

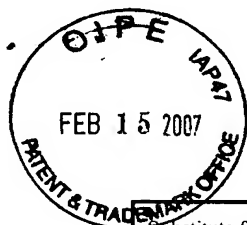


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Date: 2/15/07

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Substitute for form 1449/PTO

# **FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

## **Complete if Known**

Application Number	10/535,624
Int'l Filing Date	November 22, 2002
First Named Inventor	In-Hee LEE
Art Unit	1711
Examiner Name	To Be Assigned
Attorney Docket Number	2393.0010000/JUK/WBC

Sheet 1 of 3

## **NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
	NPL25	BELLAMY, W., <i>et al.</i> , "Antibacterial spectrum of lactoferricin B, a potent bactericidal peptide derived from the N-terminal region of bovine lactoferrin," <i>J. Appl. Bacteriol.</i> 73:472-479, Blackwell Scientific Publications (1992)	
	NPL26	BERRIDGE, N.J., "Preparation of the Antibiotic Nisin," <i>Biochem. J.</i> 45:486-493, Portland Press (1949)	
	NPL27	BLONDELLE, S.E., and HOUGHTEN, R.A., "Hemolytic and Antimicrobial Activities of the Twenty-Four Individual Omission Analogues of Melittin," <i>Biochemistry</i> 30:4671-4678, American Chemical Society (1991)	
	NPL28	CASTEELS, P., <i>et al.</i> , "Apidaecins: antibacterial peptides from honeybees," <i>EMBO J.</i> 8:2387-2391, Oxford University Press (1989)	
	NPL29	COCIANCICH, S., <i>et al.</i> , "Novel inducible antibacterial peptides from a hemipteran insect, the sap-sucking bug <i>Pyrrhocoris apterus</i> ," <i>Biochem. J.</i> 300:567-575, Portland Press (1994)	
	NPL30	DIMARCQ, J.-L., <i>et al.</i> , "Insect immunity: expression of the two major inducible antibacterial peptides, defensin and dipterocin, in <i>Phormia terranova</i> ," <i>EMBO J.</i> 9:2507-2515, Oxford University Press (1990)	
	NPL31	FRANK, R.W., <i>et al.</i> , "Amino Acid Sequences of Two Proline-rich Bactenecins," <i>J. Biol. Chem.</i> 265:18871-18874, The American Society for Biochemistry and Molecular Biology, Inc. (1990)	
	NPL32	FROHM, M., <i>et al.</i> , "The Expression of the Gene Coding for the Antibacterial Peptide LL-37 Is Induced in Human Keratinocytes during Inflammatory Disorders," <i>J. Biol. Chem.</i> 272:15258-15263, The American Society for Biochemistry and Molecular Biology, Inc. (1997)	
	NPL33	GALLO, R.L., <i>et al.</i> , "Identification of CRAMP, a Cathelin-related Antimicrobial Peptide Expressed in the Embryonic and Adult Mouse," <i>J. Biol. Chem.</i> 272:13088-13093, The American Society for Biochemistry and Molecular Biology, Inc. (1997)	
	NPL34	GANZ, T., <i>et al.</i> , "Defensins--Natural Peptide Antibiotics of Human Neutrophils," <i>J. Clin. Invest.</i> 76:1427-1435, The American Society for Clinical Investigation, Inc. (1985)	

Examiner Signature	Date Considered
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Substitute for form 1449/PTO <b>FIRST SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets as necessary)				<b>Complete if Known</b>	
Application Number				10/535,624	
Int'l Filing Date				November 22, 2002	
First Named Inventor				In-Hee LEE	
Art Unit				1711	
Examiner Name				To Be Assigned	
Attorney Docket Number				2393.0010000/JUK/WBC	
Sheet	2	of	3		

NON PATENT LITERATURE DOCUMENTS				
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume number, publisher, city and/or country where published		T <sup>2</sup>
	NPL35	GIBSON, B.W., <i>et al.</i> , "Novel Peptide Fragments Originating from PGL <sup>a</sup> and the Caerulein and Xenopsin Precursors from <i>Xenopus laevis</i> ," <i>J. Biol. Chem.</i> 261:5341-5349, The American Society of Biological Chemists, Inc. (1986)		
	NPL36	KHAN, A.A., <i>et al.</i> , "Recombinant Bactericidal/Permeability-Increasing Protein (rBPI <sub>21</sub> ) in Combination with Sulfadiazine Is Active against <i>Toxoplasma gondii</i> ," <i>Antimicrob. Agents Chemother.</i> 43:758-762, American Society for Microbiology (1999)		
	NPL37	LAMBERTY, M., <i>et al.</i> , "Solution Structures of the Antifungal Heliomicin and a Selected Variant with both Antibacterial and Antifungal Activities," <i>Biochemistry</i> 40:11995-12003, American Chemical Society (October 2001)		
	NPL38	LEMAITRE, B., <i>et al.</i> , "A recessive mutation, immune deficiency ( <i>imd</i> ), defines two distinct control pathways in the <i>Drosophila</i> host defense," <i>Proc. Natl. Acad. Sci. USA</i> 92:9465-9469, National Academy of Sciences (1995)		
	NPL39	NAKAMURA, T., <i>et al.</i> , "Tachyplesin, a Class of Antimicrobial Peptide from the Hemocytes of the Horseshoe Crab ( <i>Tachyplesus tridentatus</i> )," <i>J. Biol. Chem.</i> 263:16709-16713, The American Society for Biochemistry and Molecular Biology, Inc. (1988)		
	NPL40	OPPENHEIM, F.G., <i>et al.</i> , "Histatins, a Novel Family of Histidine-rich Proteins in Human Parotid Secretion," <i>J. Biol. Chem.</i> 263:7472-7477, The American Society for Biochemistry and Molecular Biology, Inc. (1988)		
	NPL41	PARK, C.B., <i>et al.</i> , "Structure--activity analysis of buforin II, a histone H2A-derived antimicrobial peptide: The proline hinge is responsible for the cell-penetrating ability of buforin II," <i>Proc. Natl. Acad. Sci. USA</i> 97:8245-8250, National Academy of Sciences (2000)		
	NPL42	SELSTED, M.E., <i>et al.</i> , "Indolicidin, a Novel Bactericidal Tridecapeptide Amide from Neutrophils," <i>J. Biol. Chem.</i> 267:4292-4295, The American Society for Biochemistry and Molecular Biology, Inc. (1992)		
	NPL43	STEINER, H., <i>et al.</i> , "Sequence and specificity of two antibacterial proteins involved in insect immunity," <i>Nature</i> 292:246-248, Macmillan Journals Ltd. (1981)		
	NPL44	YANG, S.-T., <i>et al.</i> , "Selective cytotoxicity following Arg-to-Lys substitution in tritrypticin adopting a unique amphipathic turn structure," <i>FEBS Lett.</i> 540:229-233, Elsevier Science B.V. (April 2003)		

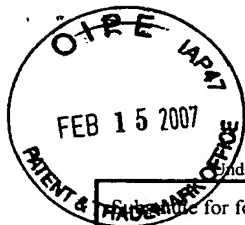
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Sheet	3	of	3	Attorney Docket Number	2393.0010000/JUK/WBC

NON PATENT LITERATURE DOCUMENTS			
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	NPL45	ZASLOFF, M., "Magainins, a class of antimicrobial peptides from <i>Xenopus</i> skin: Isolation, characterization of two active forms, and partial cDNA sequence of a precursor," <i>Proc. Natl. Acad. Sci. USA</i> 84:5449-5453, National Academy of Sciences (1987)	
	NPL46	ZHAO, C., <i>et al.</i> , "Identification of a new member of the protegrin family by cDNA cloning," <i>FEBS Lett.</i> 346:285-288, Federation of European Biochemical Societies (1994)	

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